

Chapter 1

Introduction

1.1 Background

The CALFED Bay-Delta Program is a collaborative effort of 23 Federal and State agencies that seek to resolve the water supply conflicts. The CALFED Bay-Delta Program Programmatic Record of Decision (ROD) set forth a collaborative means for addressing the environmental effects (adverse and beneficial) of CALFED Program actions related to improving water supply reliability and recovery/restoration of the Delta environment and species dependent on the Delta. Through the implementation of the Multi-Species Conservation Strategy (MSCS), the CALFED agencies assessed the effects of potential CALFED Program actions on the environment, and then developed initial conservation measures that when implemented would meet the overall CALFED Program objectives.

The MSCS is an appendix of the CALFED Bay-Delta Program Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/EIR). One of the goals of the CALFED Program MSCS is to explain how CALFED Program actions will comply with the Federal Endangered Species Act (ESA), California Endangered Species Act (CESA), and the California Natural Community Conservation Planning Act (NCCPA) requirements. The MSCS presents a program-level environmental analysis of the CALFED Preferred Program Alternative that expands upon the PEIS/EIR analysis to address the conservation strategy and certain other issues pertinent to ESA and NCCPA compliance. The US Fish and Wildlife Service (USFWS) and the National Marine Fishery Service (NOAA Fisheries) used the MSCS as the program-level biological assessment to develop the programmatic Biological Opinions (BOs) for the CALFED Preferred Program Alternative. The California Department of Fish and Game (CDFG) used the MSCS for compliance with the CESA and NCCPA.

The MSCS created a two-tiered approach to ESA and NCCPA compliance that corresponds to CALFED Program's two-tiered approach to compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The first tier of compliance is embodied in the MSCS itself. For the CALFED Program project actions identified in the PEIS/EIR and ROD, an Action Specific Implementation Plan (ASIP) is developed to address the ESA, CESA, and NCCPA consultation requirements of Federal and State agencies. As a second tier document, this ASIP focuses on issues specific to the Environmental Water Account (EWA) Proposed Action. This ASIP therefore addresses the biological assessment requirements related to the EWA water acquisition and management actions described in Chapter 2. The USFWS and NOAA Fisheries will use this ASIP to develop action-specific BOs relative to the EWA. The CDFG will use this ASIP to address compliance with the CESA and NCCPA.

This ASIP provides the environmental effects analyses on aquatic and terrestrial species and NCCP habitats based on the EWA Proposed Action. The USFWS, NOAA Fisheries, and CDFG may issue take authorization for covered species using information and analyses contained in the EWA ASIP and will use the ASIP to further MSCS recovery goals for these species.

1.1.1 Project Overview

The EWA program, as introduced in the CALFED ROD, consists of two primary elements: implementing fish actions that protect species of concern (see Section 2.4.2) and acquiring and managing assets to compensate for the supply effects of these actions (see Section 2.4.3). Actions that protect fish species include reduction of pumping at the SWP and CVP export pumping plants. Project pumping varies by season and hydrologic year and can affect fish at times when fish are near the pumps or moving through the Delta. Reducing pumping can reduce water supply reliability for the SWP and CVP service areas, causing conflicts between fishery and water supply interests. A key feature of the EWA is use of water assets to replace supplies that are lost during pump reductions. The EWA assets can also provide other benefits such as augmenting instream flows and Delta outflows. Chapter 2 provides greater detail on the EWA program.

Under the EWA Proposed Action (the Flexible Purchase Alternative), the EWA agencies would conduct purchases to provide a potentially higher level of fish protection in response to differing hydrologic conditions and to take advantage of water acquisition/storage possibilities throughout the CVP/SWP service areas. The EWA Proposed Action would allow the EWA Project Agencies to purchase up to 600,000 acre-feet of water based on the water acquisition strategies, conservation, and mitigation measures introduced in the EWA EIS/EIR. The EWA Agencies would also use variable assets and changes in CVP/SWP operations to manage water assets, in accordance with the CALFED ROD, in order to effectively respond to annual changes in hydrology and fish behavior in the Delta.

Allowing flexibility to acquire and manage EWA assets differently each year could increase the EWA Agencies' capability to respond to varying hydrologic conditions. During dry years when export pumps have more capacity to convey EWA assets, the agencies could acquire quantities up to that capacity (potentially up to 500,000 acre-feet) upstream from the Delta for storage, pre-delivery, or delayed delivery actions within the Export Service Area. The EWA Proposed Action would allow the EWA Agencies to respond to changes in existing operations and allow for additional upstream fish actions, such as instream flow enhancements.

Under the EWA Proposed Action, the Project Agencies would acquire and manage water using stored reservoir surface water, groundwater substitution, groundwater purchase, or crop idling actions. These actions would be conducted following conservation measures identified to minimize their effects on the environment or water supplies. Although EWA actions may affect some covered species and their habitats, the effects will be temporary, and the conservation measures minimize or

avoid the effects. Chapter 2 of this ASIP describes those measures applicable to the covered species and NCCP communities addressed in this ASIP.

1.1.2 Implementing Entities

Five Federal and State agencies are involved in administering the EWA. The California Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (Reclamation), or the “Project Agencies,” are responsible for acquiring water assets and for storing and conveying the assets through use of the State Water Project (SWP) and Central Valley Project (CVP)¹ and private project facilities. The “Management Agencies,” which include the State and Federal fishery agencies USFWS, NOAA Fisheries, and the CDFG, manage EWA assets to protect and restore fish. The three Management Agencies are responsible for making recommendations for actions to be taken to protect fish populations and the Project Agencies are responsible for implementing operational changes based on the recommendations.

1.1.3 ASIP Contents

To fulfill the requirements of ESA Section 7 and California Fish and Game Code Sections 2835 and 2081, as applicable, the EWA ASIP includes the following information pursuant to the November 2001 Guide to Regulatory Compliance for Implementing CALFED Actions (CALFED 2001).

- A detailed project description (Proposed Action; Chapter 2);
- The list of covered species and any other special-status species² that occur in the action area (Chapter 3);
- A discussion of essential habitat (Chapter 3);
- The analyses identifying the direct, indirect, and cumulative impacts on the covered species, other special-status species occurring in the action area (along with an analysis of impacts on any designated critical habitat) likely to result from the Proposed Action, as well as actions related to and dependent on the EWA Proposed Action (Chapter 4);
- The conservation measures the EWA Project Agencies will undertake to minimize adverse effects to species (Chapters 2 and 4), and as appropriate, measures to enhance the condition of NCCP communities (Chapters 2 and 6) and covered species along with a discussion of:
 - A plan to monitor the impacts and the implementation and effectiveness of these measures (Chapter 7),

¹ DWR operates the SWP by storing available water upstream from the Delta and moving it along with unstored natural flows through the Delta to serve agricultural and urban users in the Central Valley, central coast, and southern California. Reclamation operates the CVP in the same fashion, providing water to agricultural and urban users in the Central Valley.

² Please see the glossary for definitions of covered and special status species.

- The funding that will be made available to undertake the measures (Chapter 7), and
- The procedures to address changed circumstances (Chapter 8);
- The measures the EWA agencies will undertake to provide commitments to cooperating landowners that EWA actions will not alter their land classification (Chapter 7);
- The alternative actions considered by the EWA agencies that would not result in adverse effects, and the reasons why such alternatives are not being utilized (Chapter 7);
- The additional measures USFWS, NOAA Fisheries, and CDFG may require as necessary or appropriate for compliance with ESA, CESA, and NCCPA; and a description of how and to what extent the action or group of actions addressed in the ASIP will help the CALFED Program to achieve the MSCS's goals for the affected species (Chapters 4 and 6).

The EWA ASIP is based in large part on the biological data, CALFED Program information, and the impact analysis and conservation measures in the MSCS. The EWA ASIP has been developed to be consistent with the species goals, prescriptions, and conservation measures in the MSCS for covered species affected by the Proposed Action. Conservation measures developed for the MSCS have been reviewed for use in minimizing or eliminating the effects of EWA actions. The ASIP includes additional conservation measures to address actions not considered in the MSCS relative to EWA water acquisition and management effects.

1.2 ASIP Process

The relationship of the ESA, CESA and State NCCPA is illustrated on Figure 1-1. Because neither the programmatic BOs nor the programmatic NCCPA determination for the CALFED Program authorized incidental take of MSCS covered species, individual consultation documents, or ASIPs, are required for each project. Take authorization for entities implementing CALFED Program actions will follow a simplified compliance process that tiers from the MSCS and programmatic determinations. Entities implementing actions that may affect covered species are required to prepare an ASIP for each action or group of actions. The ASIP will be based on and tier from the data, information, analyses, and conservation measures in the MSCS. The implementing entity will coordinate development of the ASIP with USFWS, NOAA Fisheries, and CDFG to ensure that the ASIP incorporates appropriate conservation measures for the proposed CALFED Program action(s), consistent with the MSCS.

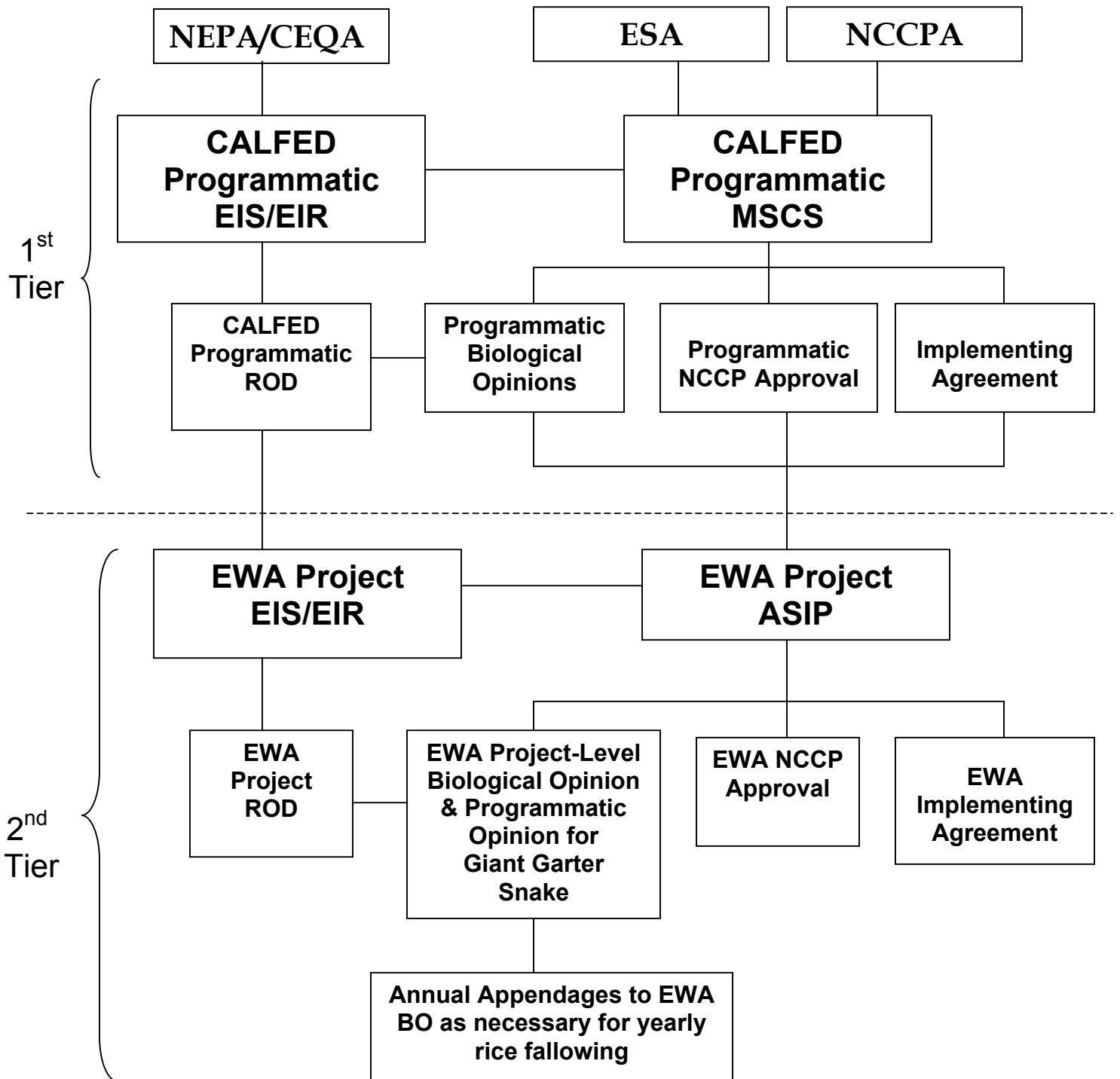


Figure 1-1
Relationships of CALFED Programmatic and EWA Compliance with
NEPA/CEQA and ESA/NCCPA

The CALFED Program MSCS evaluates 244 species and 20 natural communities. Included within the MSCS are species identified by USFWS, NOAA Fisheries, and CDFG that are covered under BOs and NCCP determination. An ASIP, including the EWA ASIP, is prepared for ESA- and NCCP-covered species potentially affected by a CALFED Program project. Typically, as in the case with the EWA ASIP, the species evaluated are a subset of the overall 244 species included in the MSCS.

1.2.1 Informal and Formal Consultation Processes

ASIPs are developed for individual CALFED Program actions or groups of actions when enough detailed information is available about the actions to analyze fully their impacts on covered species and habitats. Informal consultation is often conducted in coordination with the development of an ASIP. For the EWA program, the EWA agencies initiated informal consultation with USFWS and NOAA Fisheries in April 2002, pursuant to the ESA, the Fish and Wildlife Coordination Act, and the Magnuson-Stevens Fisheries Conservation and Management Act regarding essential fish habitat (EFH). In addition, informal consultation also was initiated with CDFG under the NCCPA. Under these acts, the EWA agencies held meetings throughout the development of this ASIP to (1) identify covered species and endangered, threatened, and proposed or candidate species that may occur in the Action Area; (2) develop an appropriate approach for assessing species listed and proposed for listing as part of the Section 7 consultations required by ESA; and (3) determine to what extent the action may affect any of the identified species, including impacts to EFH.

Once complete, the EWA ASIP will be submitted by the EWA agencies to USFWS, NOAA Fisheries, and CDFG to initiate formal consultation. USFWS and NOAA Fisheries will review the ASIP for compliance with ESA, under Section 7. NOAA Fisheries will also review the ASIP for compliance with the Magnuson-Stevens Fishery Conservation Act (MSFCA). The conclusion of the formal consultation process is for USFWS and NOAA Fisheries to prepare BOs on the species that the action is likely to adversely affect. As part of these BOs, USFWS and NOAA Fisheries may authorize incidental take of endangered and threatened species.

DFG will determine whether the EWA ASIP complies with the NCCPA and CESA. If the ASIP is in compliance with the NCCPA, CDFG will prepare an NCCPA approval and issue supporting findings. As part of these findings, CDFG may authorize take of covered species, including endangered and threatened species, whose conservation and management are provided for in an approved NCCP. Because the NCCPA allows CDFG to authorize incidental take of endangered and threatened species, an NCCP also may be used to comply with CESA (Fish and Game Code Sections 2081[b] and 2835).

1.2.2 Current Management Direction

The EWA program and ASIP have been developed against a backdrop of existing and ongoing Federal, State, and local efforts intended to conserve covered and other

sensitive species within the EWA Action Area. Implementation of the EWA Proposed Action would be consistent with existing wildlife protection and recovery programs.

Consultation with USFWS, NOAA Fisheries, and CDFG regarding effects of EWA actions on special-status species is based on the ESA policy for each agency and existing BOs and NCCPA guidance. The opinions and guidance documents used to support the development of the EWA ASIP are listed below:

- The CALFED Programmatic EIS/EIR;
- The CALFED Multi-Species Conservation Strategy;
- The 1995 USFWS opinion for CVP/SWP operations effects on delta smelt; and
- The 1993 NOAA Fisheries opinion for CVP/SWP operations effects on Sacramento River winter-run Chinook salmon ESU.
- USFWS' Programmatic BO on the CALFED Bay-Delta Program dated August 28, 2000;
- NOAA Fisheries' CALFED Bay-Delta Program Programmatic BO dated August 28, 2000; and
- CDFG's Natural Community Conservation Planning Act Approval of the CALFED Bay-Delta Program Multi-Species Conservation Strategy dated August 28, 2000.

1.2.3 Consultation to Date

The EWA Program was included in the programmatic BOs for the CALFED PEIS/EIR (Section 1.3.3). Reclamation and DWR initiated informal ESA Section 7 consultation with USFWS and NOAA Fisheries in April 2002 regarding the EWA Program. In addition, informal NCCPA consultation also was initiated with CDFG. The lead agencies have held meetings with USFWS, NOAA Fisheries, and CDFG throughout the development of the EWA Proposed Action and this ASIP. At these meetings, issues pertaining to development of the ASIP were discussed by the ASIP team members, which included representatives from Reclamation, DWR, CALFED agencies, USFWS, NOAA Fisheries, and CDFG.

1.2.4 Compliance with Federal Endangered Species Act

USFWS and NOAA Fisheries share responsibility for administering ESA. NOAA Fisheries has primary responsibility for implementing ESA with respect to marine fishes and mammals, including migratory or anadromous fish species such as salmon and steelhead. USFWS has primary responsibility for other species.

The purpose of the ESA section 7(a)(2) consultation requirement is to ensure that any action authorized, funded, or carried out by any Federal agency is not likely to jeopardize the continued existence of any covered species or result in the destruction or adverse modification of critical habitat. Typically, a biological assessment is

prepared to analyze effects on listed and proposed species and designated and proposed critical habitat in order to comply with ESA. This ASIP is intended to act as a biological assessment and fulfill the requirements of the EWA pursuant to the ESA as amended.

1.2.5 Compliance with Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA)

The MSFCMA, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance EFH. Federal agencies are required to consult with NOAA Fisheries on all actions that may adversely affect EFH (MSFCMA Section 305(b)(2)). The EFH mandate applies to all species managed under a Federal Fishery Management Plan (FMP). In California there are three FMPs covering Pacific salmon, coastal pelagic species, and groundfish. NOAA Fisheries, under Section 305(b)(1) of the MSFCMA, is required to provide EFH conservation and enhancement recommendations to Federal and State agencies for actions that adversely affect EFH.

The objective of an EFH assessment is to determine whether the proposed action(s) “may adversely affect” designated EFH for relevant commercially, federally managed fisheries species within the Action Area. It also describes conservation measures proposed to avoid, minimize or otherwise offset potential adverse effects to designated EFH resulting from the proposed action.

This ASIP will meet all the compliance requirements that have been identified for consulting with NOAA Fisheries on effects to EFH, as outlined in the MSFCMA.

1.2.6 Compliance with California Endangered Species Act and the Natural Community Conservation Planning Act

The CESA (Fish and Game Code Sections 2050 to 2097) is similar to the ESA. California’s Fish and Game Commission is responsible for maintaining lists of threatened and endangered species under the CESA. CESA prohibits the “take” of listed and candidate (petitioned to be listed) species. “Take” under California law means to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill.” (California Fish and Game Code, section 86.) Because CDFG may authorize incidental take of listed species pursuant to a CDFG approved NCCP, EWA agencies will not require a separate incidental take permit pursuant to CESA for ASIP covered species if the EWA actions adhere to MSCS goals and CDFG’s NCCP Approval.

The NCCPA, California Fish and Game Code, section 2800, et seq., was enacted to form a basis for broad-based planning to provide for effective protection and conservation of the State’s wildlife heritage, while continuing to allow appropriate development and growth. State of California NCCP General Process Guidelines define an NCCP as “...a plan for the conservation of natural communities that takes an ecosystem approach and encourages cooperation between private and

governmental interests. The plan identifies and provides for the regional or area-wide protection and perpetuation of plants, animals, and their habitats, while allowing compatible land use and economic activity. An NCCP seeks to anticipate and prevent the controversies caused by species' listings by focusing on the long-term stability of natural communities" (NCCP 2002). The purpose of natural community conservation planning is to sustain and restore those species and their habitat identified by CDFG that are necessary to maintain the continued viability of biological communities impacted by human changes to the landscape. A NCCP identifies and provides for those measures necessary to conserve and manage natural biological diversity within the plan area while allowing compatible use of the land. CDFG may authorize the take of any identified species, including listed and non-listed species, pursuant to Section 2835 of the NCCPA, if the conservation and management of such species is provided for in an NCCP approved by CDFG.

The CALFED Programmatic Multi-Species Conservation Strategy was approved by CDFG as a program-level NCCP. The MSCS' project-level compliance process centers on a multi-purpose project-level environmental document called an "ASIP," which is intended to provide one format for all information necessary to initiate project-level compliance with the ESA and the NCCPA. EWA agencies will comply with the NCCPA through the ASIP, which contains all the necessary components of a project-level NCCP for the EWA study area.

On February 2, 2002, Governor Davis signed SB 107, which completely repealed and replaced the NCCPA with a new NCCPA. SB 107 became effective on January 1, 2003. However, in accordance with Section 2830 (c) of SB 107, the MSCS will remain in place as an approved NCCP, and CDFG may authorize take of Covered Species pursuant to the MSCS and CDFG's NCCP Approval.

This ASIP serves as the project-specific NCCP for EWA water acquisition and management actions. The document meets all the compliance requirements that have been identified for (a) preparing an NCCP and (b) other requirements associated with CESA consultation. This ASIP will fulfill the requirements of the California Fish and Game Code Sections 2835 and 2081. Additionally, it will incorporate appropriate conservation measures relevant to the EWA proposed action. This approach is consistent with the NCCP conservation strategy for the conservation of natural communities and related species before these species reach a point for having to become listed.

1.3 Relationship to CALFED Program and CALFED Documents

1.3.1 CALFED Program

The purpose of the CALFED Program is to develop and implement a comprehensive, long-term plan that will restore ecological health to the Bay-Delta system and improve management of water for beneficial uses, and the EWA is one component of the overall CALFED Program strategy. To achieve its overall purpose, the CALFED

agencies will address problems of the Bay-Delta system within four critical resource categories:

- ecosystem quality;
- water quality;
- water supply reliability; and
- levee system integrity.

There are important physical, ecological, and socioeconomic linkages between the problems and possible solutions in each of these categories. Accordingly, the CALFED agencies cannot work to solve problems in one resource category without addressing problems in the other resource categories. The CALFED planning effort was divided into a three-phase cooperative planning process. This process should make it easier to determine the most appropriate strategy and actions to reduce conflicts in the Bay-Delta system. During Phase I, begun in May 1995, decision-makers defined problems of the Bay-Delta system and began to develop a range of alternatives to solve them. An initial group of actions was developed and refined into three preliminary categories of solutions to be considered in Phase II. Phase II ended when the final Programmatic EIS/EIR was approved. Implementation of the Preferred Program Alternative began Phase III and will continue in stages over many years. Phase III includes any necessary studies and site-specific environmental review and permitting. The CALFED Program is currently in Stage 1 of Phase II, which includes the implementation of CALFED Program actions through the initial 7 years till September 2007 (See Glossary under CALFED Program Phases).

A component of the CALFED Program is the Ecosystem Restoration Program (ERP). The goal of the ERP is to improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species. In addition, the ERP, along with the Water Management Strategy (WMS), is designed to achieve or contribute to the recovery of covered and at-risk species found in the Bay-Delta and, thus, achieve goals in the MSCS. Improvements in ecosystem health will reduce the conflict between environmental water uses and other beneficial uses and allow more flexibility in water management decisions. EWA agencies are coordinating EWA actions with the ERP to ensure that EWA is consistent with the ERP goals.

Representative ERP actions identified in the CALFED Programmatic ROD include:

- Protecting, restoring, and managing diverse habitat types representative of the Bay-Delta and its watershed;
- Acquiring water from sources throughout the Bay-Delta's watershed to increase flows and improve habitat conditions for fish protection and recovery;
- Restoring critical instream and channel-forming flows in Bay-Delta tributaries;

- Improving Delta outflow during key periods;
- Reconnecting Bay-Delta tributaries with their floodplains through the construction of setback levees, the acquisition of easements, and the construction and management of flood bypasses for both habitat restoration and flood protection;
- Developing assessment, prevention, and control programs for invasive species;
- Restoring aspects of the sediment regime by relocating instream and floodplain gravel mining by artificially introducing gravels trapped by dams; modifying or eliminating fish passage barriers, including the removal of some dams; constructing fish ladders; and constructing fish screens that use the best available technology; and
- Targeting research to provide information that is needed to define problems sufficiently and to design and prioritize restoration actions.

1.3.2 Programmatic Environmental Impact Statement/Environmental Impact Report and Record of Decision

The CALFED Bay-Delta Program PEIS/EIR was prepared in compliance with the National Environmental Policy Act (NEPA), Reclamation policy and procedures for implementing NEPA, and the California Environmental Quality Act (CEQA). The PEIS/EIR document describes, in a broad sense, the environmental consequences of the preferred program alternative and alternatives and enabled decisions to be made regarding program direction and content. Information from this document will be incorporated by reference into this ASIP, where applicable.

The CALFED PEIS/EIR and ROD and CEQA findings represent the culmination of the NEPA and CEQA processes. The ROD identifies the final selection of a long-term plan (Preferred Program Alternative), which includes specific actions to restore natural biological function of the Bay-Delta, describes a strategy for implementing the plan, and identifies complementary actions the CALFED agencies will also pursue. The EWA Proposed Action will be carried out in a manner consistent with the PEIS and ROD and CEQA Findings. A detailed description of the EWA Proposed Action can be found in Chapter 2 of this document.

1.3.3 Programmatic Biological Opinions and Natural Community Conservation Plan

As stated in Section 1.2.2, the following programmatic BOs and the NCCP Agreement address implementation of the CALFED Bay-Delta Program and provide direction for development of the EWA ASIP. It is expected that the CALFED Programmatic BOs will be appended based on USFWS, NOAA Fisheries, and CDFG determinations on this ASIP. Key elements of the project description in these documents are as follows.

- USFWS Programmatic BO on the CALFED Bay-Delta Program dated August 28, 2000; key elements of the USFWS BO regarding the EWA.
- NOAA Fisheries CALFED Programmatic BO dated August 28, 2000; key elements of the NOAA Fisheries BO repeat those of the USFWS BO on the EWA.
- CDFG's Natural Community Conservation Planning Act Approval of the CALFED Bay-Delta Program Multi-Species Conservation Strategy dated August 28, 2000; key elements of the NCCP Determination for the EWA repeat those of the USFWS BO on the EWA.

Pertinent elements of the BO's and NCCP Agreement include the following items

- All EWA fixed assets (purchases) are acquired each year.
- The EWA Operational Principles Agreement is signed and fully implemented.
- The Project Agencies shall request clarification with USFWS, CDFG, and NOAA Fisheries on any points that appear to be ambiguous related to fishery actions for the EWA.
- If EWA assets are depleted and the USFWS, NOAA Fisheries, and CDFG determine Tier 3 is necessary, Tier 3 assets will be available to protect fish.
- As new water storage and conveyance projects are being planned, potential fishery impacts will be assessed. If necessary to offset potential impacts and to provide for recovery of fish populations, operational rules will be developed that will provide for protection of fish. These operational rules may include but are not limited to 1) limits on the timing and magnitude of exports and water supply releases at key periods of fish concern and 2) new sharing formula to increase EWA assets, which would allow the EWA to offset impacts and implement restoration actions. EWA coverage for such actions would come from separate consultation for operating criteria and procedures or in consultations tiered from this opinion, as appropriate.
- If the EWA is not fully implemented, project operations will return to the regulatory baseline.

1.3.4 Multi-Species Conservation Strategy

Five documents establish CALFED agencies' program-level compliance with ESA and NCCPA:

- CALFED Bay-Delta Program Multi-Species Conservation Strategy;
- Conservation Agreement regarding the CALFED Bay-Delta Program Multi-Species Conservation Strategy;
- USFWS's Programmatic BO on the CALFED Bay-Delta Program;

- NOAA Fisheries' Programmatic BO on the CALFED Bay-Delta Program; and
- CDFG's NCCPA Approval of the CALFED Bay-Delta Program Multiple Species Conservation Strategy.

Collectively, these documents cover the jurisdictions of USFWS, NOAA Fisheries, and CDFG and fulfill the various requirements of ESA and the NCCPA pertaining to the CALFED Preferred Program Alternative. USFWS, NOAA Fisheries, and CDFG along with cooperating CALFED agencies have coordinated their efforts to ensure that ASIP documents create a single, coherent approach for regulatory compliance.

The MSCS is an appendix of the CALFED Bay-Delta Program Final Programmatic EIS/EIR that explains how the CALFED agencies will meet the requirements of ESA, CESA, and the NCCPA. The MSCS draws on key elements of the CALFED Preferred Program Alternative, such as the Ecosystem Restoration Program (ERP) and the EWA to outline a comprehensive strategy for the conservation of numerous species of fish, wildlife, and plants, and their habitats. The MSCS presents a program-level environmental analysis of the Preferred Program Alternative that expands upon the PEIS/EIR analysis to address the conservation strategy and certain other issues pertinent to ESA and NCCPA compliance. The MSCS served as the program-level biological assessment of the Preferred Program Alternative for purposes of initiating consultations with USFWS and NOAA Fisheries under Section 7 of ESA. The MSCS also served as the program-level NCCP for DFG approval for NCCPA compliance.

The MSCS creates a two-tiered approach to ESA and NCCPA compliance that corresponds to the CALFED agencies' two-tiered approach to compliance with NEPA and CEQA. The first tier of compliance is embodied in the MSCS itself and in the program-level compliance documents. For the second tier, the MSCS outlines a single project-level compliance process for both ESA and the NCCPA that complements the second tier project-level environmental review of CALFED Program actions under NEPA and CEQA.

For first tier or program-level compliance, the MSCS identifies 244 "evaluated" species and 20 natural communities (habitat types) that could be affected by CALFED Program actions. The MSCS identifies:

- Conservation goals for NCCP communities and covered species;
- Prescriptions for achieving NCCP community and species goals;
- Potential CALFED Program impacts on NCCP communities, covered species, and ESA designated critical habitats;
- Conservation measures that:
 - have been incorporated into the ERP that temporally and spatially direct ERP actions to help achieve or contribute to the recovery of selected species;

- refine other CALFED Program elements to achieve species goals;
 - will be incorporated into the CALFED Science Program to achieve species monitoring and research needs; and
 - apply to all CALFED Program elements that are designed to avoid, minimize, and compensate for impacts on NCCP communities and covered species; and
- A framework for CALFED Program compliance with ESA, CESA, and NCCPA at both the programmatic and project-specific levels.

This first tier of compliance is intended to ensure that, at the program level, the Preferred Program Alternative will not jeopardize the continued existence of a covered species or destroy or adversely modify habitat critical to their survival, as required by ESA Section 7, and will conserve certain evaluated species, as required by the NCCPA.

For the second-tier compliance, the MSCS explains how individual CALFED Program actions can be designed to comply with ESA and the NCCPA and can be analyzed and authorized in a single, multipurpose compliance process. The MSCS's project-level compliance process centers on use of the ASIP, a multi-purpose project-level environmental document that is intended to provide one format for all information necessary to initiate project-level compliance with ESA and the NCCPA. An ASIP must be prepared for any CALFED Program action that may adversely affect a covered species.

The MSCS provided direction for development of the EWA ASIP. Also, information from this document is incorporated by reference into this ASIP, where applicable.

1.4 Species Addressed in This ASIP

To comply with ESA, CESA, and NCCP requirements, the EWA agencies must identify a list of special-status species to be evaluated in the EWA ASIP. Special-status species include those species that fit into at least one of the following categories:

- MSCS covered species identified in the programmatic BOs and NCCP approval for the CALFED Program;
- Listed as threatened or endangered under ESA;
- Proposed for listing under ESA;
- Candidates for listing under ESA;
- Has been identified as EFH by NOAA Fisheries;
- Listed as threatened or endangered under CESA;

- Candidates for listing under CESA;
- Plants listed as rare under the California Native Plant Protection Act;
- Fully protected species or specified birds under various sections of the California Fish and Game Code;
- California species of special concern (CSC);
- Plants included on California Native Plant Society (CNPS) List 1A, 1B, 2, or 3; or
- Other native species of concern to CALFED Program.

The section below presents these species.

Using the list of species developed from reviewing the species provided from the sources above, literature research was performed to identify those species most likely to be affected by EWA asset acquisition and management actions. The process used to identify the species that are covered in this ASIP is described in the following subsection.

1.4.1 Identification of Species Analyzed in Detail in the ASIP

Pursuant to Section 7(c) of ESA, the EWA Agencies requested species lists from USFWS and NOAA Fisheries regarding any species listed or proposed for listing as threatened or endangered, including designated or proposed critical habitats under ESA and CESA, that may be present in the EWA Action Area. Additionally, the EWA agencies developed a list of special-status species known to occur or with the potential to occur within the Action Area compiled from the California Natural Diversity Database (CNDDDB) and California Native Plant Society's Inventory of Rare and Endangered Plants. More than 400 special-status fish, wildlife, and plant species considered in the MSCS were combined with the results from the species request lists and the database search to generate a preliminary species list. Table A-1 in Appendix A provides the list of species considered for incorporation into this ASIP. Section 3.1 outlines the criteria used for the selection of species addressed in this ASIP. The species addressed in this ASIP are listed in Table 1-1.

Initial screening of the overall species list eliminated from further consideration those species that only inhabited areas outside areas where EWA actions would take place. The second level of screening was based on species that occasionally visited (their life cycles are not dependent on) habitats affected by EWA actions. These included mostly migratory species that may be observed infrequently in areas where EWA actions could occur. Details regarding the life histories and status of the species that may be observed within the EWA Action Area (See Section 2.1 for definition of EWA Action Area), and the rationales why they are not covered in this ASIP, are presented in Appendix A.

1.4.2 Critical Habitat

ESA-designated critical habitat for two covered species is present in the EWA Action Area. The entire legal Delta as defined by California Water Code of 1969 and portions of Suisun Bay and Suisun Marsh are designated critical habitat for the delta smelt. Portions of the Sacramento River and its tributaries are also designated as critical habitat for the Sacramento River winter-run Chinook salmon. Pursuant to ESA requirements, the EWA ASIP also analyzes potential effects of EWA actions on designated critical habitats in the EWA Action Area.

1.4.3 Essential Fish Habitat (EFH)

Six species within the EWA Action Area require consultation under the Magnuson-Stevens Fishery Conservation and Management Act. These species include:

- Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*);
- Central Valley spring-run Chinook salmon;
- Central Valley fall and late-run Chinook salmon;³
- Northern anchovy (*Engraulis mordax*);
- Pacific Sardine (*Sardinops sagax*); and
- Starry flounder (*Platichthys stellatus*).

Table 1-1 Species Addressed in the EWA ASIP		
Species	Scientific Name	Status
Central Valley Fall/Late Fall Run Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	Federal candidate
Sacramento River Winter Run Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	Federal and State listed endangered species
Central Valley Spring Run Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	Federal threatened species; State threatened species
Central Valley Steelhead	<i>Oncorhynchus mykiss</i>	Federal threatened species
Delta Smelt	<i>Hypomesus transpacificus</i>	Federal threatened species; State threatened species
Sacramento Splittail	<i>Pogonichthys macrolepidotus</i>	Federal threatened species
Green Sturgeon	<i>Acipenser medirostris</i>	Federal candidate; CDFG species of special concern
Aleutian Canada Goose	<i>Branta canadensis sp. leucopareia</i>	Federal species of concern
Black Tern	<i>Chlidonias niger</i>	CDFG species of special concern
Black Crowned Night Heron	<i>Nycticorax nycticorax</i>	CDFG sensitive species
Greater Sandhill Crane	<i>Grus canadensis tabida</i>	California threatened species; California fully-protected species
Long-billed Curlew	<i>Numenius americanus</i>	CDFG species of special concern

³ Not specifically listed by the Pacific Fisheries Management Council but addressed in the NOAA Fisheries BO.

Table 1-1 Species Addressed in the EWA ASIP		
Species	Scientific Name	Status
Tricolored Blackbird	<i>Agelaius tricolor</i>	CDFG species of special concern
White-faced Ibis	<i>Plegadis chici</i>	CDFG species of special concern
Great Blue Heron	<i>Ardea herodias</i>	CDFG species of special concern
Great Egret (rookery)	<i>Casmerodius albus</i>	CDFG species of special concern
Snowy Egret (rookery)	<i>Egretta thula</i>	Federal species of concern
Giant Garter Snake	<i>Thamnophis gigas</i>	Federal threatened species; State threatened species
Western Pond Turtle	<i>Clemmys marmorata</i>	CDFG species of special concern

This ASIP addresses EWA effects on the habitats of the salmon and steelhead fish species. The life cycles of these species incorporate much of the aquatic (stream and Delta) habitats affected by EWA actions. The ASIP does not address the northern anchovy, Pacific sardine, or starry flounder because the majority of the habitats occupied by these species lies outside the Action Area for EWA effects.

1.5 NCCP Habitats

A total of 20 natural communities were analyzed on a broad, programmatic basis in the MSCS – 18 habitats and 2 ecologically based fish groups. The term “NCCP communities” refers to both habitats and fish groups. All 20 communities analyzed in the MSCS were considered for analysis in this ASIP. Of the 20 community types, 5 have not been evaluated in this ASIP for the reasons given below. Detailed descriptions of the 20 habitats and fish groups, including their assigned conservation goal from the MSCS, can be found in Chapter 3. Section 10.2.4 in the EWA EIS/EIR contains a detailed analysis for each NCCP community. Appendix B provides a crosswalk of MSCS NCCP communities to other community and habitat classification systems.

1.5.1 Grassland

EWA actions not will affect this habitat because the root zone of the plant species is elevated above any EWA-induced water level change.

1.5.2 Upland Scrub

EWA actions will not affect this habitat because the root zone of the plant species is elevated above any EWA-induced water-level change.

1.5.3 Valley/Foothill Woodland and Forest

EWA actions will not affect this habitat because the root zone of the plant species is elevated above any EWA-induced water-level change.

1.5.4 Montane Woodland and Forest

EWA actions will not affect this habitat because the root zone of the plant species is elevated above any EWA-induced water-level change.

1.5.5 Inland Dune Scrub

EWA actions will not affect this habitat because the root zone of the plant species is elevated above any EWA-induced water-level change.

1.6 Organization of This ASIP

This ASIP is a combined Federal ESA and California NCCPA compliance document. To address the requirements of both acts, the ASIP is organized as follows:

Chapter 1, “Introduction” provides an introduction to the project and the ASIP process, describes the relationship of the ASIP to CALFED Program, lists the species and habitats to be addressed in this document, and outlines the organization of the document.

Chapter 2, “Description of the Proposed Action” describes the EWA Action Area and EWA Proposed Action.

Chapter 3, “Environmental Basis of Comparison – Special Status Species Accounts and Status in EWA Action Area” provides the species accounts for ASIP covered species.

Chapter 4, “Species Assessment Methods and Impact Analyses” provides an analysis of the direct, indirect, and cumulative effects on covered species within the Action Area likely to result from implementation of the EWA Proposed Action, as well as actions related to and dependent on that action. This analysis also includes a discussion of the conservation measures to avoid, minimize, and compensate for such effects, as appropriate.

Chapter 5, “Environmental Basis of Comparison – NCCP Community Descriptions” presents descriptions of NCCP communities within the EWA Action Area mostly likely affected by EWA actions.

Chapter 6, “Effects of the Proposed Action on NCCP Communities inside the Action Area” provides an analysis of the direct, indirect, and cumulative effects on NCCP communities within the Action Area (along with an analysis of effects on any designated critical habitat) likely to result from implementation of the EWA Proposed Action, as well as actions related to and dependent on that action. This analysis also includes a discussion of the conservation measures to avoid, minimize, and compensate for such effects, as appropriate.

Chapter 7, “Monitoring, Adaptive Management, and other Disclosures” assesses the cumulative effects of the EWA Proposed Action. Chapter 7 also outlines a plan to monitor the effects and the implementation and effectiveness of the conservation measures; discusses the funding sources available and that will be provided for

implementation of the EWA Proposed Action; identifies measures the implementing entity will undertake to provide commitments to cooperating landowners; and discusses the alternatives that were considered that would not result in take and the reasons why such alternatives are not being utilized.

Chapter 8, “Changed Circumstances” describes anticipated changed circumstances that would affect implementation of the project. This chapter also describes strategies and protocols for addressing anticipated changes.

Chapter 9, “Effects Determination Conclusion” summarizes the potential cumulative effects with implementation of the EWA Proposed Action.

Chapter 10, “References” is a list of all the sources cited in the document.

The “Appendices” contain supporting technical data, including species lists and critical habitat descriptions. Hydrologic modeling output is provided on a separate CD and is available upon request.

Appendix A contains species and NCCP community accounts for those species and NCCP communities not covered by this ASIP.

Appendix B contains a detailed description of the modeling methods used to analyze effects to special-status fish species.

Appendix C contains the fish decision trees.